the antennæ are unfortunately imperfect, there being only twelve joints on the left flagellum and ten on the right one, Miers gives the numbers as 14 to 24, but, even with the addition of the missing joints, I think he has overstated the length.

The antennules are short and slender, extending slightly beyond the antepenultimate peduncular joint of the antennæ. The second joint of the antennæ is deeply grooved laterally, and the fourth and fifth joints elongated and subequal.

The mouth-parts have not hitherto been described or figured. The maxillæ present no special features. The maxillipedes are thin and flattened, in consequence of which the fourth joint does not move in a groove on the anterior border of the third joint, a character I have found in various stages of development in quite a large number of species of this genus, but, curiously, not mentioned in any of the descriptions, so far as I am aware.

*I. hectica* belongs to that division of the genus *Idotea* which is characterized by the narrow, elongated, filiform body, and in which the epimera are either not visible dorsally or else are very small, and contains such species as *I. linearis* (Linn.), *I. indica*, M.-Edwards, and *I. elongata*, Miers.

EXPLANATION OF PLATE IX.

*Fig.* 1. Dorsal view.
*Fig.* 2. Antennule.
*Fig.* 3. Peduncle of antennæ.
*Fig.* 4. First maxilla.
*Fig.* 5. Second maxilla, terminal portion.
*Fig.* 6. Maxillipede.
*Fig.* 7. Left uropod.

---

## XXIII.—*Descriptions of new Species of Mollusca from various Localities.* By G. B. Sowerby, F.L.S.

[Plate X.]

*Drillia parciplicata*, sp. n. (Pl. X. fig. 1.)

Testa elongato-acuminata, sordide albida; spira elongata; anfractus 7, primus rotundatus, secundus planato vix convexus, sequentes convexi, obtusissime angulati, oblique parci-plicati, ad suturam leviter concavi; anfractus ultimus oblongus, convexus, fere lævis, ½ longitudinis testæ æquans. Apertura oblonga, latiuscula; labrum acutum, leviter inflexum, postice late et profunde

sinuatum ; columella rectiuscula, tenuiter callosa ; canalis brevis, latus.
Long. 13, maj. diam. 5 mm.

*Hab.* Nagasaki.

This species is chiefly characterized by a few smooth oblique plicæ on the whorls of the spire.

*Columbella plicatospira,* sp. n. (Pl. X. fig. 2.)

Testa subcylindracea, polita, pallide lutescens, juxta suturam fascia interrupta rufo-fusca ornata ; spira elata, convexiuscula ; anfractus 6, leviter convexi, haud angulati, plicis numerosis læves crassiusculi, interstitiis paulo angustioribus, longitudinaliter instructi, sutura angustissima sejuncti ; anfractus ultimus oblongus, supra leviter convexus, infra medium contractus, infra suturam breviter sed conspicue plicatus, aliter lævis. Apertura elongata, mediocriter lata ; labrum incrassatum, intus quinquedentatum ; columella rectiuscula tenuissime lamellata.
Long. 10, maj. diam. $3\frac{1}{2}$ mm.

*Hab.* Japan.

This shell is chiefly characterized by the stout straight plicæ on the whorls of the spire and the few short ones, rendered conspicuous by the bright brown interrupted band, and forming a sort of crown to the body-whorl.

*Olivella inusta,* sp. n. (Pl. X. fig. 6.)

Testa parva, rimata, oblonga, solidula, nitida, pallide fusco-luteola, saturate fusco late balteata ; spira acuta ; anfractus 5, levissime convexi, sutura angustissime canaliculata sejuncti ; anfractus ultimus subcylindricus $\frac{2}{3}$ longitudinis testæ vix æquans, infra lira angusta obliqua instructus, supra et infra nitide fusco late balteatus. Apertura anguste trigona ; labrum vix incrassatum ; columella albo callosa, sinistrorsum obliqua.
Long. $3\frac{1}{2}$, maj. diam. 2 mm.

*Hab.* Florida.

Chiefly recognized by the two broad shining bands and the cylindrical form of the body-whorl.

*Lotorium* (*Cymatium*) *kiiensis,* sp. n. (Pl. X. fig. 7.)

Testa subfusiformis, antice rostrata, postice pyramidalis, irregulariter varicosa et longitudinaliter plicata, liris angustis transversis paulo elevatis, creberrime granulosis sculpta, epidermide tenuis partim scabrosa induta ; spira elata, conoidalis ; anfractus 6, primi rotundati, reliquiæ obtuse angulati ; anfractus ultimus elongato-pyriformis, lateribus crassivaricosis, plicis paucis distantibus

munitus; rostrum elongatum, irregulariter tortuosum. Apertura ovalis, intus rufo-violacea, leviter sulcata; labrum incrassatum, intus sex-nodulosum; columella leviter arcuata, tenuiter albo callosa, transversim anguste granoso lirata, infra medium biplicatum.
Long. 37, lat. 18 mm.

*Hab.* Kii, Japan.

Compared with Reeve's *Triton exaratus*, this shell is of a much narrower and less angular form. It somewhat approaches *T. elongatus*, also of Reeve.

*Natica* (*Polinices*) *tenuicula*, sp. n. (Pl. X. fig. 3.)

Testa subglobosa, tenuis, umbilicata, pallide luteo-fuscescens, postice nigro-fusca; spira breviter conica; anfractus $4\frac{1}{2}$, convexi, læves, sutura angustissime canaliculata sejuncti; anfractus ultimus amplus, inflatus, rotundatus, oblique irregulariter rugosus. Apertura ampla, intus fusca, antice albo radiata; labrum tenue, arcuatum; columella rectiuscula, postice tenuiter callosa; umbilicus profundus, mediocriter latus.
Long. 37, maj. diam. 34; apert. long. 30, lat. 18 mm.

*Hab.* Nomuro, Japan.

This shell is hardly comparable with any known species. It is of a light substance and has somewhat the external appearance of a species of *Amaura*. The operculum is unfortunately wanting.

*Pentadactylus fusco-imbricatus*, sp. n. (Pl. X. fig. 4.)

Testa fusiformis, anguste rimata, pallide luteola, fusco maculata, profuse squamulata, longitudinaliter costata, squamis aculeatis fuscis supra costas instructa; spira elata, acuta; anfractus 7, obtuse angulati; sutura vix conspicua; anfractus ultimus supra convexus, infra medium constrictus. Apertura elongata, leviter sinuata, antice angusta, postice latior; labrum leviter incrassatum, fimbriatum, extus aculeatum, intus quinque denticulatum; canalis mediocriter latus; columella lævis, supra arcuata, infra leviter sinuata.
Long. 19, diam. 12 mm.

*Hab.* Hawaii.

Only four specimens of this species were sent to us some years ago from Hawaii. The one I have selected as the type is the most perfect, and the conspicuous brown scales are sharper and more prominent than in the others. The species seems to vary considerably, and I delayed describing it in the hope of getting more specimens, which, however, have

not come. The brown scales on the light yellowish ground form a very conspicuous character.

*Littorina eudeli*, sp. n. (Pl. X. fig. 5.)

Testa ovato-turbinata, solidiuscula, contecte rimata, pallida, lineis longitudinaliter undulatis picta; spira elata, acuta; anfractus 5, convexe rotundati, sutura angustissima sejuncti; anfractus ultimus amplus, rotunde convexus, supra et infra spiraliter inepte sulcatus. Apertura late semicircularis, leviter obliqua, fauce glabra, fusca; labrum arcuatum, acutum; columella obliqua, planulato-callosa, fusco tincta.
Long. 11, diam. 9 mm.

*Hab.* Pondicherry (*Eudel*).

At the sale in Paris of the collection of Captain Emile Eudel in 1893, I purchased a considerable number of shells of this species, which all these years appears to have remained unnamed. I am now venturing to give it a name, as it seems quite different from any known species. The ziczac markings seem at once to suggest the name *L. ziczac*, but the West-Indian species of that name is more elately conical and has a distinct angle at the periphery.

*Diala vitrea*, sp. n. (Pl. X. fig. 8.)

Testa ovato-pyramidalis, vix rimata, pellucida, tenuissima, glabra vel longitudinaliter obscurissime scalpta; spira elate conica, acuta; anfractus 6, convexi, leviter rotundati; ultimus longitudinis spiram fere æquans, leviter inflata; varicibus paucis, vix conspicuis, haud elevatis. Apertura ovalis; labrum tenue, simpex; columella leviter opaca, arcuata.
Long. 6, diam. 5 mm.

*Hab.* Ise, Japan (*Hirase*).

A delicate transparent shell, with much the appearance of a small *Limnæa*. The varices, characteristic of the genus, are not at all prominent, and appear in the form of two or three slightly opaque rays on the body-whorl and one on the penultimate.

*Minolia liricincta*, sp. n. (Pl. X. fig. 15.)

Testa minuta, globulosa, crassiuscula, umbilicata, alba, postice pallide fusco tincta; spira breviter conica, subgradata; anfractus $3\frac{1}{2}$, convexi, penultimus obtuse angulatus, spiraliter triliratus; anfractus ultimus globosus, spiraliter sex-liratus, supra obtuse angulatus, ad peripheriam rotundatus; umbilicus profundus,

circularis, mediocriter latus. Apertura circularis; peristoma simplex.
Alt. 2½, lat. 2¼ mm.

*Hab.* Bitter Lakes, near Suez.

A little white shell of a globular form, acute at the apex, the first whorls being tinged with light brown. In the absence of the operculum I cannot be quite sure of the generic position of this species, but think I have placed it correctly.

*Pecten* (*Chlamys*) *scabricostatus*, sp. n. (Pl. X. fig. 14.)

Testa æquivalvis, æquilateralis, tenuicula, suborbicularis compressiuscula, supra peracuta, infra rotundata; auriculis valde inæqualibus, sinistra lata, acutangulata leviter squamosa, dextra multo brevior, rectangularis, valva sinistra leviter convexa, undique angustissime radiatim lirata, costis 18–20 rotundatis, crassiusculis, aliquis breviter erecte squamatis radiata.
Alt. 55, lat. 50, crass. 16 mm.

*Hab.* Swan River, West Australia.

About fifty years ago a considerable number of shells of this species came to London, and were distributed under various names, such as *senatorius* (Gmel.), *gloriosus* (Reeve), *prunum* (Reeve), &c.; but I have always considered the identification, to say the least of it, quite unsatisfactory. The species differs from all the varieties of *senatorius* (including those bearing the two last-mentioned names) by its broader and less numerous ribs, some of them bearing a few erect prominent scales, a character which at once catches the eye, as they only appear generally on every fourth rib, the others being nearly smooth or having only very small inconspicuous foliation.

The colours, as in *P. senatorius*, are very varied; the shell I have selected as type is light brown at the upper part, and the remainder pink, while some are plain yellow all over; others again are mottled with brown, yellow, and white.

The dimensions given are about the average. The largest of the ten specimens before me measures 68 × 65 and the smaller 40 × 36 mm.; but I have seen one magnificent specimen of a beautiful clear yellow colour throughout and measuring 78 mm. This shell belonged to the collection of the late S. I. Da Costa.

*Volsella compta*, sp. n. (Pl. X. fig. 10.)

Testa oblonga, tenuis, vivide purpurea, epidermide tenuis leviter

scabrosa induta, concentrice creberrime scalpta; margo dorsalis leviter arcuatus, postice rotundatus, ventralis leviter incurvus; umbones obtusi, subterminali.

*Hab.* Iyo, Japan (*Hirase*).

*Cardium* (*Serripes*) *notabile*, sp. n. (Pl. X. fig. 9.)

Testa inflata, sordide albida, epidermide pallida tenuiter induta, concentrice creberrime striata, utrinque breviter radiatim sulcata; margo dorsalis posticus late arcuatus, anticus brevis, valde declivis, ventralis suboblique arcuatus; latus anticum rotundatum, posticum late arcuatum; umbones obtusi, valde incurvati, ante medium locati.

Antero-post. 80, umbono-marg. 77 mm.

*Hab.* Wakasa, Japan (*Hirase*).

I have as yet only seen one specimen of this species, which is of a much more tumid form than *Serripes grönlandicus*.

*Macoma transcalpta*, sp. n. (Pl. X. fig. 11.)

Testa oblongo-subovalis, tenuicula, leviter compressa, albida, creberrime oblique striata, postice acute angulata, concentrice filostriata; margo dorsalis anticus elongatus, levissime arcuatus, posticus brevis valde declivis; margo ventralis arcuatus; latus anticum rotundatum, posticum obtuse angulatum; umbones minuti, post medium locati; dens cardinalis in utraque valvæ duo, lateralis nullis.

Antero-post. 25, umbono-marg. 15 mm.

*Hab.* Oshima, Japan.

Distinguished by the very fine oblique striæ nearly covering the surface of both valves.

*Macoma anatinoides*, sp. n. (Pl. X. fig. 12.)

Testa oblonga, tenuicula, albida, iridescens, lævis, concentrice subtilissime striata, postice leviter hiata; margo dorsalis anticus elongatus, arcuatus; posticus leviter declivis, rectiuscula; ventralis longus, antice rotundatus, postice leviter ascendens; umbones vix elevati, post medium locati; dens cardinalis in utraque valvæ duo, lateralis nullis.

Antero-post. 28, umbono-marg. 15 mm.

*Hab.* Philippines (?).

The shell is of simple character, resembling in form a species of *Anatina*. The surface is apparently smooth, but under the lens it is seen to be closely concentrically striated, and it has an iridescent lustre.

Several specimens were found among a lot of Philippine shells; but the habitat, although probable, must be regarded as uncertain.

*Donax cacuminatus*, sp. n. (Pl. X. fig. 13.)

Testa trigonalis, crassa, alba, postice fusco-tincta, undique radiatim crebrisulcata, postice recto declivis, acutangulata, antice leviter producta; umbones acuti, post medium locati.
Antero-post. 22, umbono-marg. 15 mm.

*Hab.* I. Pins, New Caledonia.

Somewhat resembling the West-Indian *D. denticulatus*, but more acute at the posterior angle, and without the undulated corrugation ot the posterior area characteristic of that species.

EXPLANATION OF PLATE X.

*Fig.* 1. *Drillia parciplicata.*
*Fig.* 2. *Columbella plicatospira.*
*Fig.* 3. *Natica* (*Polinices*) *tenuicula.*
*Fig.* 4. *Pentadactylus fusco-imbricatus.*
*Fig.* 5. *Littorina eudeli.*
*Fig.* 6. *Olivella inusta.*
*Fig.* 7. *Lotorium* (*Cymatium*) *kiiensis.*
*Fig.* 8. *Diala vitrea.*
*Fig.* 9. *Cardium* (*Serripes*) *notabile.*
*Fig.* 10. *Volsella compta.*
*Fig.* 11. *Macoma transcalpta.*
*Fig.* 12. —— *anatinoides.*
*Fig.* 13. *Donax cacuminatus.*
*Fig.* 14. *Pecten* (*Chlamys*) *scabricostatus.*
*Fig.* 15. *Minolia liricincta.*

---

## XXIV.—*New Species of Indo-Malayan Lepidoptera.*

By Colonel C. Swinhoe, M.A., F.L.S.

*Danainæ.*

*Bahora annetta*, nov.

♂. Pale ochraceous, larger than *B. aspasia*, Fabr., from Java and the Malay Peninsula, very nearly resembles Doherty's figure of his *chrysea* from Engano Island; but the cell of the fore wing is densely clouded with black, and the ochreous interspace above the hinder margin is quite clear, and broader and more squarely cut at its outer end than in